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Hair restorer.

Hair restorer consisting of natural ingredients for application to the scalp made from a mixture of castor oil, almond oil, olive oil and preferably coconut oil. Glycerol and/or paraffin oil are also preferably added.

The invention relates to a hair restorer for application to the scalp made from natural ingredients.

There has long been a recurring need for products and substances that stop hair loss or even stimulate hair re-growth. The effects of thinning hair or the formation of bald patches are for people of both sexes of major psychological significance for the self-confidence and enjoyment of life of those affected.

Several theories have been proposed concerning the reasons for hair loss, such as the theory that the main cause is excessive sebum secretion with the resultant disturbance to cutaneous respiration. Another theory is that due to the increase in size of the bony skull, the scalp becomes excessively stretched and as a result the skin with the hair papillae is placed under pressure, as a result of which the supplying blood vessels are constricted.

Various measures to prevent hair loss are possible, such as the administration of hormones or vitamins, or the rubbing in of hair oils, creams or lotions. Surgical intervention i.e. transplanting healthy hair to bald patches, is also widespread nowadays.

However, the surgical method, apart from its high price, is marred by the risks of all surgical interventions and is often unable to remedy the actual causes of hair loss.

Thus DE-OS 2 145 204 describes a hair tonic based on sulphonated olive oil or castor oil. This sulphonated oil is used as a detergent base and forms some 60-70% by volume of the tonic. It additionally uses hair nutrients such as sulphur, a hair restorer such as acetyl salicylic acid, corrective products, proteins, and the like. A relatively large number of constituents is used for this tonic, which also have to be mixed into it in varying proportions. Moreover, depending on the cause of the hair loss, provision is made to alter the composition somewhat. Thus the use of various groups of substances is also provided as well as a method of manufacture that is more expensive because it is more accurate.

This also applies to the hair growth promoting composition of Austrian patent 440 609. In addition to vegetable oils as a binding and thickening base, an aqueous extract of crocus corms, salicylic acid and precipitated sulphur as active substances is provided. Here too the individual components are added in varying quantities and in addition require special manufacturing methods. This applies in particular to the manufacture of the aqueous extract of crocus corms that forms the active substance of the composition.

DE OS 33 01 158 describes a hair restorer that consists of natural/untreated vegetable oils and camomile flower extract. Two of these oils are used in the same quantity, but the third vegetable oil is added in a smaller quantity and the resultant mixture is then mixed with camomile flowers and heated once to boiling to extract their active substances and then left to stand for a while. It must then be filtered off and left until cold. Here again varying doses of the individual components of the hair restorer are required and the stage of extracting the camomile flowers also makes the manufacturing method relatively time-consuming.

It should also be noted that in none of the hair restorers or hair tonics cited is the favourable effect of almond oil mentioned.

It is true of many of the preparations that are currently available in commerce, whether they are chemically synthesised or naturally-based, for example made from herb extracts or the like, that they cannot remedy the actual causes of the hair loss. In the case of some of these

products, once their application ceases, hair loss recommences, if it has been possible to achieve any improvement at all.

The aim of the invention was therefore the development of a hair restorer on a natural, preferably vegetable, base, that reliably stops hair loss, stimulates the growth of strong healthy hair and cares for and protects the scalp. At the same time as simple as possible a manufacturing method should be ensured, so that there is no need for complicated dosing of the individual components or lengthy preparation and manufacturing processes.

The hair restorer of the invention is characterised in that it is a mixture of castor oil, almond oil and olive oil, with these vegetable oils or fats preferably present in equal proportions in the mixture.

The preparation of the invention stops hair loss if used for around two to twelve weeks, depending on the nature of the skin and the cause, and stimulates hair growth so that bald patches disappear and thinning hair becomes thicker. The hair that grows due to use of the preparation of the invention is strong. A favourable effect on the scalp is also achieved with the removal of dandruff and the prevention of the formation of new dandruff.

In the following description additional features and characteristics of the invention are described in detail.

The main component of the preparation of the invention is a mixture of at least three vegetable oils or fats with greatly differing saponification and iodine numbers, namely castor oil, almond oil and olive oil. In order to avoid the phrase "fats and oils" in the following, regardless of the physical state of the substance at any given temperature, only the expression "oil" will be used, since the preferred substances are substantially liquid at room temperature. As is widely known, in chemical terms vegetable oils and fats are fatty acid glycerol esters. Since glycerol is a trihydric alcohol, mixed esters often occur, i.e. two or three different fatty acids are bonded to one glycerol molecule. In addition, these oils can contain other substances, such as phytosterols (high-molecular aromatic alcohols).

The above-mentioned saponification number is the quantity of pure potassium hydroxide in mg (used in solution) used for the complete saponification of 1g of oil. The saponification

number is therefore indicative of the average molecular size of the fatty acids that are present. The higher the saponification number, the more low molecular weight, volatile fatty acids are present. The numerical range of the saponification numbers extends from 170 – 180 (e.g. for castor or grapeseed oil) to mid-range values of 190 – 195 (such as for olive, almond and sunflower oil) to 205 – 290 (e.g. 258 – 264 for coconut oil).

The iodine number indicates how many grams of iodine react, with loss of colour, with 100g fat, and thus provides a comparative measure for the number of unsaturated fatty acids, i.e. those with double bonds. Here the numerical values extend from below 10 (coconut oil 7.5 – 9.4) to values of 120 – 200 (e.g. linseed oil, poppy oil).

The mixture of castor oil, almond oil and olive oil is especially effective in achieving the aim and the following table shows their properties:

Name	Density	Slip point	Saponification number	Iodine number
Castor oil (oleum ricini)	0.95 – 0.97	-10° to -12°C	176-190	82-90
Almond oil (oleum amygdalarum dulcium)	0.91 – 0.92	-10°C	190 - 195	95 - 100
Olive oil (oleum olivarum)	0.91 – 0.92	-6°C	185-203	75-94

When used individually, cosmetic and medical applications are known for all three of the oils mentioned. This also applies to an additional vegetable oil, which in accordance with a further feature of the invention is advantageously added. The oil in question is coconut oil (oleum cocos) with a density of 0.88 to 0.9, a melting point of 20 to 23°C, a saponification number between 255 – 260 and an iodine number of 7.5 – 9.5. In addition the coconut milk that passes into the hard and fat-rich kernel, contains traces of growth substances (e.g. 0.1 ppm diphenyl urea).

If, as is preferably provided by the invention, the vegetable oils are present in the mixture in equal proportions, their characteristics come to maximally balanced effect and give optimum results for the types of oil used. The mixing ratio is volumetrically determined.

A preparation made from the four oils described in detail above gave the best test results, in that with a contact time of two to twenty-four hours per application followed by thorough rinsing, over a fairly long period (two to six weeks), the hair grew back, even in people with completely bald patches. The longer the contact time per application, the denser, stronger and faster the hair grew. The treatment should preferably be performed twice weekly before going to bed, by first shaking, then applying an appropriate quantity of the preparation to the scalp, distributing it by massaging gently and rubbing it in with the fingertips. On the morning after the treatment, the hair is washed with a high-quality soap. Depending on individual needs, the treatment is performed for at least six weeks or only stopped after the new hair growth has become strong.

Even when the treatment is stopped the stimulating and hair growth promoting effect is usually retained for periods of at least six months. It is assumed that synergistic effects are responsible for these effects.

Finally, additional substances can also be added to the mixture of vegetable oils described above. These are preferably glycerol (propanetriol) and paraffin oil (vaseline oil, liquid paraffin). These two substances can each be added alone, but preferably they are both present in the preferred variant of the hair restorer of the invention. Due to its hygroscopic nature glycerol acts as a humectant, and paraffin oil is used to dilute the active substances contained in the vegetable oils.

On the basis of the above, confirmed by practical trials, the following mixture has proved to be the preferred composition with the best hair-restoring and growth-promoting effect: almond, castor, olive and coconut oil in volumetrically equal parts, together with glycerol and paraffin oil. In a closed bottle the mixture remains stable and usable for six months.

Example:

A mixture of 1/6 parts by volume each of castor oil, sweet almond oil, olive oil, coconut oil, glycerol and paraffin was applied twice weekly to a scalp suffering from hair loss and dandruff and was gently massaged in for three minutes in each instance. Hair loss ceased after the lotion had been used for 15 days. Over the same period the dandruff also disappeared. The first hair began to grow about 40 days after use of the lotion.

The lotion also accelerated the growth of the hair.

It was moreover also determined that the lotion should not remain on the head for more than 24 hours.

Patent claims

1. Hair restorer for application on the scalp made of natural components, characterised in that it is a mixture of castor, almond and olive oil, in which these vegetable oils or fats are preferably present in equal parts in the mixture.
2. Hair restorer according to Claim 1, characterised in that in addition coconut oil is added.
3. Hair restorer according to one of the preceding claims, characterised in that glycerol and/or paraffin oil is added.